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CLAIMS

What is claimed is:

- A heat transfer system for use on a spacecraft having heat dissipating apparatus, the system comprising:
- a heat source disposed on the spacecraft at a location that is remote from heat dissipating apparatus; and
- 5 a loop heat pipe thermally coupled between the heat source and the heat dissipating apparatus for coupling heat generated by the heat source to the heat dissipating apparatus.
 - 2. The spacecraft radiator system recited in Claim 1 wherein the loop heat pipe comprises flexible thin walled tubing coupled between an evaporator that is thermally coupled to the heat source and a condenser that is thermally coupled to heat dissipating apparatus.
 - 3. A spacecraft comprising:

heat dissipating apparatus for radiating heat into space;

a heat source disposed at a location that is remote from heat dissipating apparatus; and

- a loop heat pipe thermally coupled between the heat source and the heat dissipating apparatus for coupling heat generated by the heat source to the heat dissipating apparatus.
- 4. The spacecraft recited in Claim 2 wherein the loop heat pipe comprises flexible thin walled tubing coupled between an evaporator that is thermally coupled to the heat source and a condenser that is thermally coupled to heat dissipating apparatus.
- A heat dissipation method for use on a spacecraft comprising the steps of: disposing a heat source on a spacecraft at a location that is remote from heat dissipating apparatus;

thermally coupling a loop heat pipe between the heat source and the heat $\,\,$ 5 $\,\,$ dissipating apparatus; and

coupling heat generated by the heat source to the heat dissipating apparatus by way of the loop heat pipe.

6. The method recited in Claim 5 wherein the loop heat pipe comprises flexible thin walled tubing coupled between an evaporator that is thermally coupled to the heat source and a condenser that is thermally coupled to heat dissipating apparatus.